

Lofexidine for Drug Detoxification

In the United States, 5.9 million people are dependent upon illegal drugs, including nearly a quarter-of-a-million people who abuse heroin. Heroin is an opioid that is chemically related to the pain-reliever morphine. When people use opioid drugs (legally or illegally) for long periods of time, it can be difficult to stop the drugs due to withdrawal symptoms.

The withdrawal symptoms associated with stopping opioid drugs include anxiety, difficulty sleeping, irritability, nausea, diarrhea, sweating, rapid heartbeat, high blood pressure, and flu symptoms. Often, opioid detoxification involves use of another opioid called methadone. Methadone lasts for a long time in the body. That property delays the onset of withdrawal symptoms. But, patients often become dependent upon this opioid, too. Essentially, patients are switched from being dependent upon one drug, to being dependent upon another. Since methadone works similarly to morphine or heroin, it can be abused, too. It is often sold illegally on the streets and high doses of methadone can be deadly.



Another drug that is sometimes used for opioid detoxification is clonidine. For detoxification purposes, clonidine works mostly in the brain to decrease activity of chemicals that cause the rapid heart beat, high blood pressure, sweating, and symptoms of upset stomach that occur during opioid withdrawal. While clonidine is a more attractive option than methadone because it is not likely to be abused, this drug can lower blood pressure substantially and it makes people very sleepy. More recently, a new drug similar to clonidine, but with fewer side effects, has been used in the United Kingdom. This drug, called lofexidine, is not approved in the United States yet.

Nine studies have looked at the effects of lofexidine in managing symptoms of opioid withdrawal. When compared to an inactive pill (placebo), people using lofexidine experienced less severe symptoms during drug withdrawal. When lofexidine was compared to clonidine, the

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National Institute on Drug Abuse

www.nida.nih.gov/Infofacts/Painmed.html

www.nida.nih.gov/ResearchReports/Heroin/Heroin.html

www.nida.nih.gov/ResearchReports/Prescription/prescription7.html

two drugs seem to be similar in their ability to block withdrawal symptoms, but patients taking clonidine experienced greater decreases in blood pressure and were more likely to be tired and sedated compared to those that were given lofexidine. Therefore, the newer drug seems to be tolerated better. However, it is less clear from current studies if lofexidine is as effective as methadone; it does not seem to be superior to methadone and some studies have found that withdrawal symptoms may be better controlled with methadone than lofexidine.

In clinical studies, doses of 0.8 mg to 2.4 mg daily are those that were most commonly used, and treatment lengths have varied from a few days to several weeks. Because of the possibility of agitation and large increases in blood pressure, the drug should never be stopped abruptly, but instead the dose should be gradually reduced over a period of 2 to 4 days.

Sleeping difficulty was the most frequent side effect associated with lofexidine use, but this could be due to drug withdrawal, too, and not

necessarily be a side effect of the drug. Dry mouth and eyes, sleepiness, and dizziness are other unwanted effects reported by people taking the drug. Lofexidine should be used cautiously in people with heart conditions because it can lower blood pressure and cause changes in the heart's electrical activity (observed on electrocardiograms; special caution should be exercised if used in combination with methadone).

Lofexidine is not a miracle drug. It does not decrease cravings that people have for opioid drugs, and lofexidine does not help with all the symptoms associated with withdrawal. Patients still experienced difficulty sleeping and muscle aches while taking the drug.

Currently, the best way to use lofexidine in management of opioid detoxification is not clear and, at this time, the drug is not approved for use in the United States. Nonetheless, if approved, it could provide another option for people enrolled in opioid detoxification programs, with less concern of blood pressure problems or abuse than the current treatment options.